

REMARKS

In view of the above amendments and following remarks, reconsideration and further examination are requested.

In response to the objection to the specification for introducing new matter as expressed in section 1 on page 2 of the Office Action, please note that the changes made to lines 4, 5 and 17 on page 31 of the original specification are fully supported by the original disclosure. In this regard, the paragraph bridging pages 30 and 31 of the original specification corresponds to Figures 25-27, wherein Figure 26 shows the chuck-to-chuck distance to be 30mm and the pull rate to be 100mm/min. The changes made to lines 4, 5 and 17 of the original specification were merely to correct typographical errors and did not introduce any new matter into the specification.

In response to the 35 U.S.C. § 112, second paragraph, rejection as expressed in section 3 on pages 2-3 of the Office Action, the term "easily" has been deleted from claim 35.

In response to the 35 U.S.C. § 112, second paragraph, rejection of claims 39-42 as expressed in section 4 on page 3 of the Office Action, the term "rate" has been deleted from claims 39-42.

The Examiner rejected claims 22-28, 33-36 and 43 under 35 U.S.C. § 103(a) as being unpatentable over JP '397. The Examiner rejected claims 29-32, 37 and 38 under 35 U.S.C. § 103(a) as being unpatentable over JP '397 in view of Lau et al. And, the Examiner rejected claims 39-42 under 35 U.S.C. § 103(a) as being unpatentable over JP '397 in view of JP '085. These rejections are respectfully traversed for the following reasons.

Independent claim 22 recites a decorating sheet that has specific characteristics as recited in (i) and (ii) of that claim. Similarly, claims 39 and 41 recite a method for manufacturing a decorating sheet that has specific characteristics as recited in (i) and (ii) of these claims. And, independent claim 43 recites a decorated article formed from a decorating sheet that has characteristics as expressed in (i) and (ii) of this claim. None of the references relied upon by the Examiner teach or suggest a decorating sheet having the specific characteristics as recited in each of claims 22, 39, 41 and 43, and accordingly, these claims are allowable over the references relied upon by the Examiner either taken alone or in combination.

With regard to the specific characteristics of the decorating sheet as claimed, the Examiner has taken the position that JP '397 renders obvious such a decorating sheet. Basically, the Examiner has taken the position that because JP '397 discloses a sheet that comprises a methyl methacrylate (acrylic) layer upon which is formed a polyacrylonitrile-butadiene-styrene (ABS) layer, and because on page 30 of the original specification a decorating sheet including an acrylic sheet having a thickness of 0.07 mm and an ABS backing sheet having a thickness of 0.33 mm is disclosed, JP '397 will necessarily possess or exceed the specific characteristics as recited in claims 22, 39, 41 and 43. This position taken by the Examiner is respectfully submitted to be in error for the following reasons.

While it is true that a disclosed example of the claimed decorating sheet includes an acrylic sheet and an ABS sheet, it does not necessarily follow that a sheet including the acrylic layer and ABS layer of JP '397 will exhibit or possess the properties as recited in each of the independent claims. The apparent basis for the Examiner's position is that because the ABS layer of JP '397 exceeds the thickness of the ABS sheet referred to in Applicant's specification, because the acrylic layer of JP '397 exceeds the thickness of the acrylic sheet referred to in Applicant's specification, and because JP '397 teaches that the thickness of the acrylic layer and the ABS layer have an impact on mechanical strength, the characteristics as recited in the claims will be exhibited by the sheet of JP '397. Such might be true if thickness were the sole factor influencing mechanical strength of the decorating sheet; however, thickness is but a single factor that influences the mechanical strength of the decorating sheet comprised of an acrylic sheet and an ABS sheet. All acrylic material and all ABS sheets are not the same, and mechanical strength of a decorating sheet comprised of an acrylic sheet and an ABS sheet is also influenced by the acrylic material and ABS sheet used.

In this regard, an acrylic film can be made from, for example, a rigid acrylic rubber or a soft acrylic rubber, along with additives such as antioxidants, ultraviolet light absorbers, and the like. Thus, acrylic resin films have greatly different mechanical characteristics, for example Young's modulus, depending on whether the acrylic resin includes rigid acrylic rubber or soft acrylic rubber, and the amount of the rubber in the acrylic resin. For example, when an acrylic

resin is about 90% rigid acrylic rubber, such as higher molecular methyl-methacrylate, a film made from this resin has a higher softening temperature and poor stretchability. To the contrary, when an acrylic resin is about 40% soft or lower molecular acrylic rubber, a film made from this resin has a lower softening temperature and higher stretchability. Stated otherwise, there are numerous types of acrylic resins which exhibit a wide range of mechanical characteristics.

Similarly, an ABS sheet can also be of numerous types which exhibit numerous mechanical characteristics. Specifically, ABS is a copolymer resin of acrylonitrile, butadiene and styrene monomer. Polybutadiene, which is a polymerized-butadiene, is a typical rubber material and has high stretchability at normal temperatures. Polystyrene, which is a polymerized-styrene, is a typical rigid resin material and has poor stretchability unless heated to at least its softening temperature. It is known that α -methylpolystyrene with a methyl group has a very high softening temperature (generally greater than 150°C) and is a typical heat-resistant material.

An ABS sheet with a higher butadiene component is greatly different from an ABS sheet with a higher styrene component (specifically, α -methylstyrene) with regard to thermal properties and mechanical properties (such as Young's modulus). Stated otherwise, there are numerous type of ABS sheets which exhibit a wide range of different mechanical characteristics.

Accordingly, that JP '397 and the instant invention each pertain to a sheet including an acrylic layer and an ABS layer in no way establishes that the sheet of JP '397 necessarily possesses the properties as recited in each of the independent claims, even though the thickness of the JP '397 sheet is greater than that of the decorating sheet disclosed by Applicant. Because of the many types and different mechanical characteristics of acrylic material and ABS sheets, it is respectfully submitted that it does not necessarily follow that the specific characteristics as recited in the independent claims are possessed by the sheet disclosed by JP '397, simply because this sheet includes an acrylic layer and an ABS layer that are thicker than the acrylic sheet and ABS sheet as disclosed in the instant specification.

Thus, it is respectfully submitted that the Examiner has not sufficiently shown the decorating sheet as recited in the claims to be substantially identical in structure or composition to the sheet of JP '397, and accordingly, the examiner has not established a *prima facie* case of either

anticipation or obviousness whereby the burden of proof has now shifted to Applicant to show that the product of JP '397 does not necessarily or inherently possess characteristics of the claimed decorating sheet.

Lau et al. and JP '085 do not resolve these deficiencies of JP '397, and accordingly, claims 22-43 are allowable over any of the references relied upon by the Examiner either taken alone or in combination.

Additionally, claims 29-32, 37 and 38 are believed to be patentable in their own right since it is respectfully submitted that a combination of JP '397 and Lau et al. would not result in the invention as recited in these claims, even assuming *arguendo* that the decorating sheets as recited in claim 22 is disclosed by JP '397. In this regard, Lau et al. discloses radiation-curable olefin material having excellent surface characteristics and light-resistance; however, normally such olefin material does not exhibit stretchability. Lau et al. fails to teach or suggest that such material can be applied to film usage, and indeed it may be impossible to use as film material a material into which such olefin material has been mixed.

Contrarily, the olefin material of the present invention is added to polypropylene, and is an ethylene-propylene rubber having elasticity such that when added to the polypropylene a film having excellent stretchability is obtained, whereby the decorating sheet is not broken during a molding operation. That is, even though the instant invention and Lau et al. each disclose olefin materials, the olefin material of the present invention greatly differs from that of Lau et al. with regard to various characteristics. Thus, if the olefin material of Lau et al. is added to polypropylene it might be impossible to form a film, and even if a film can be formed a sheet having excellent characteristics like the decorating sheet of the instant invention would not necessarily be obtained. Accordingly, claims 29-32, 37 and 38 are patentable in their own right.

Furthermore, claims 39-42 are also believed to be patentable in their own right over a combination of JP '397 in view of JP '085, assuming *arguendo* that the decorating sheet as recited in claims 39 and 41 is disclosed by JP '397. In this regard, the Examiner points out that JP '085 discloses a biaxially stretched polypropylene film which is similar to that of the present invention. The biaxially stretched polypropylene film of JP '085 has a rupture stretch of at least 200% so as

to sufficiently stretch during in-mold transfer, and sufficiently conform a transfer foil to a molded product, so as to result in obtaining a deeply drawn molded product. To the contrary, the biaxially stretched polypropylene film of the present invention is hardly stretched and shrunk, and exhibits a dimensional change under an ambient temperature of 90°C of within 0.6%, and thus, a pattern layer can be formed with high accuracy. Please note that claims 39-42 have been amended to insert the term --within-- before "0.6 %" to further bring out this feature.

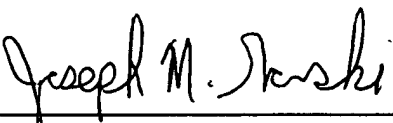
Thus, the biaxially stretched polypropylene film of the present invention greatly differs from that of JP '085, and accordingly, claims 39-42 are patentable in their own right.

In view of the above amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and an early Notice of Allowance is earnestly solicited.

If after reviewing this Amendment, the Examiner believes that any issues remain which must be resolved before the application can be passed to issue, the Examiner is invited to contact the Applicant's undersigned representative by telephone to resolve such issues.

Respectfully submitted,

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